August 2000

Final Environmental Assessment

Channel and Turning Basin Expansion
Tampa Harbor – Alafia River
Hillsborough County, Florida

U.S. Army Corps
of Engineers
Jacksonville District

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

CHANNEL WIDENING AND TURNING BASIN EXPANSION
TAMPA HARBOR - ALAFIA RIVER
HILLSBOROUGH COUNTY, FLORIDA

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed the Environmental Assessment (EA) of the proposed action. This Finding incorporates by reference all discussions and conclusions contained in the Environmental Assessment attached hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion are in summary:

1. The proposed work would not jeopardize the continued existence of any endangered or threatened species. Standard manatee protection conditions and special blasting conditions would be implemented to protect manatees.

2. It has been determined that the proposed work would not impact historic resources in the project area. The State Historic Preservation Officer has not concurred with the U.S. Army Corps of Engineers' determination that there would be no effect on sites of cultural or historical significance. No work would be implemented until this concurrence has been received.

3. State water quality standards will be met. A water quality certification has not been obtained from the State.

4. The proposed project has been determined to be consistent with the Florida Coastal Zone Management Program and concurrence by the State of Florida.

5. Measures to eliminate, reduce, or avoid potential impacts to fish and wildlife resources will be implemented during project construction. A mitigation plan which includes the creation of 6 acres of mangroves, 2 inter-tidal channels, a mangrove slough, exotic plant eradication and 2 reptile ponds will be constructed to offset the loss of habitat.

6. Dredged material would be used to create 52 acres of bird nesting and foraging areas and 107 acres on inter-tidal saltmarsh.

7. Benefits to the public will be maintenance of the navigation channel and continued local economic stimulus.

In consideration of the information summarized, I find that the proposed action will not significantly affect the human environment and does not require an Environmental Impact Statement.

_____
Date

_____
JAMES G. MAY
Colonel, Corps of Engineers
Commanding

Fonferek/CESAJ-PD-ER/2803/slw
Birchett/CESAJ-PD-ER
Dugger/CESAJ-PD-ER
McAdams/CESAJ-PD-EE
Smith/CESAJ-PD-E
Strain/CESAJ-PD-A
Murphy/CESAJ-DP-I
Duck/CESAJ-PD
Pike/CESAJ-OC
Burns/CESAJ-DX
Boruch/CESAJ-DD
May/CESAJ-DE

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FIGURES

TABLES

APPENDICES

1 PURPOSE AND NEED FOR ACTION

1.1. Introduction:

The Corps is studying the feasibility of expanding the Alafia River Navigation Channel. In doing so, the Corps is looking at the existing channel design and determining what if any measures are necessary to make the channel as efficient and safe as possible while controlling costs and protecting natural resources. The optimum design will be evaluated to determine if there is a federal interest in making this channel a federal project.

1.2. Authority.

This study is authorized by Water Resources Development Act 1992.

1.3. Decision to be Made

The decision to be made is whether to construct the navigation improvements at this site.

1.4. Relevant Issues.

a) Water Quality
b) Benthic Habitat
c) Sea Grass Beds
d) Manatees
e) Birds
f) Wetlands
g) Cultural Resources
h) Aesthetics
i) Recreation
j) Economics
k) Navigation

1.5. Permits Required

A Water Quality Certification (WQC) will be required from the State of Florida. In addition, the State of Florida will also provide concurrence in the Corps Coastal Zone Consistency Determination at various stages of planning. The final ascent to this determination is the issuance of the WQC.

1.6. Methodology

An interdisciplinary team used a systematic approach to analyze the affected area, to estimate the probable environmental effects, and to prepare the Environmental Assessment (EA).

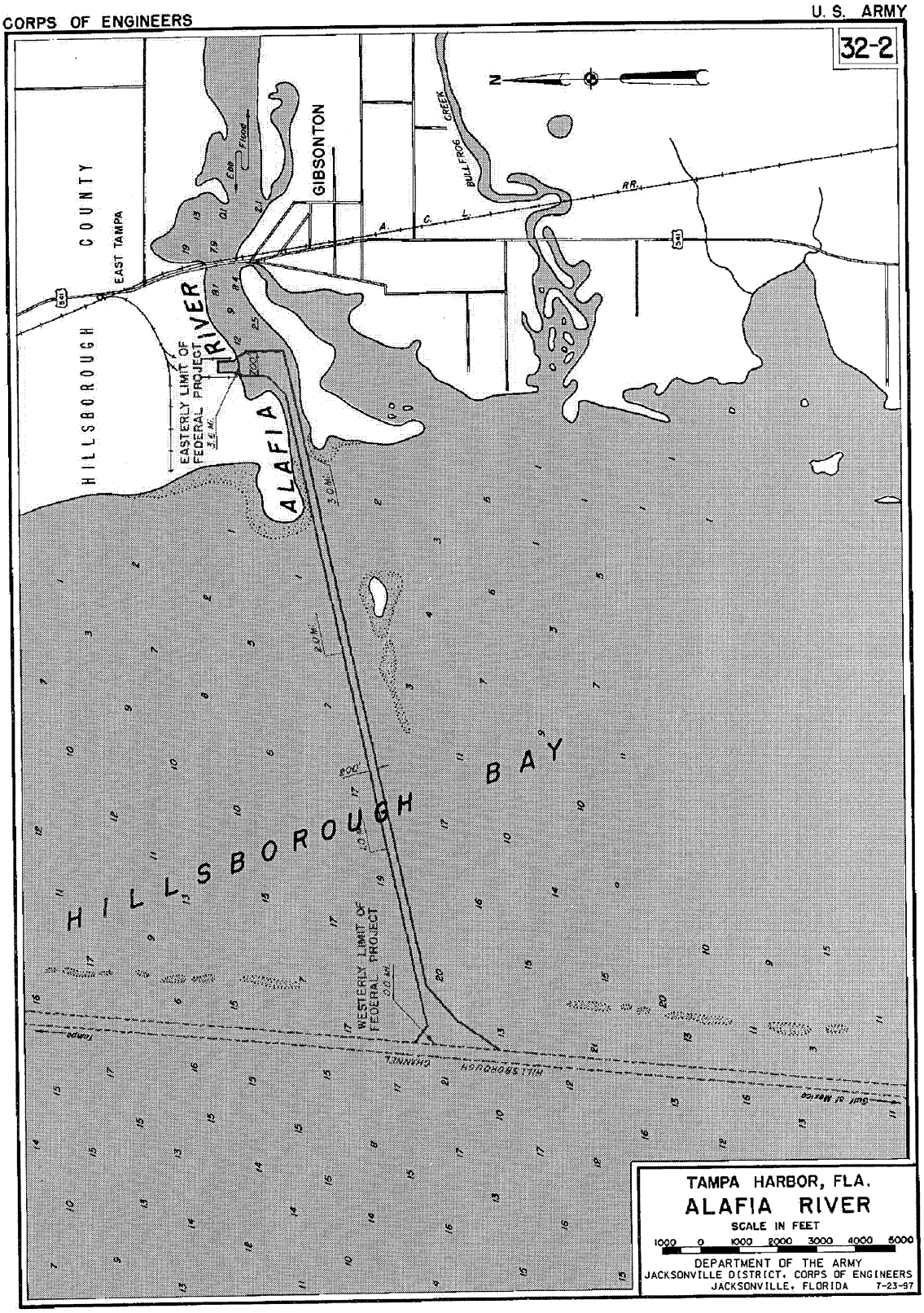

Figure 1, Project Map

2 ALTERNATIVES

2.1 INTRODUCTION.

This section is based on concerns for resources and impacts upon resources expressed in Section 3.00, Affected Environment, and Section 4.00, Environmental Consequences. The key to this section is the Alternative Comparison Chart (Table 1), page 5. The Alternatives section has five (5) parts:

a. A description of the process used to derive alternatives.
b. A description of the alternatives that were initially considered but later eliminated from detailed investigation.
c. A description of each alternative.
d. A comparison of the alternatives.
e. Identification of the Preferred Alternative.

2.2 HISTORY OF ALTERNATIVE FORMULATION

The Tampa Port Authority requested the Corps study improvements to the Alafia River Navigation Channel. In accordance with the guidelines set forth in the EM-1110-2-1613 (1983), channel width criteria are 2.8 times the width of a Design Vessel Beam. This would require an additional 4 feet in depth, and an additional 25 feet in width on either side to accommodate the average 85-foot vessel beam. Although some vessels are larger, current users of the expanded Big Bend channel (250-ft.) are experiencing no significant problems. Various locations are offered for the disposal of dredged material. These include island renourishment options, filling of marine dredge scars and channels, upland disposal, the Ocean Dredged Material Management Area, and littoral creation. The Corps will make the final location determination. The Tampa Port Authority (TPA) has also requested the turning basin be expanded, and included in the Corps navigation channel expansion project. Numerous meetings with the Port and local environmental groups were conducted to discuss the various alternative designs. The channel design was optimized based on the above criteria. The expansion of the turning basin was considered. Several new turning basins were considered including the creation of a new bulk loading area west of the Placement Area C.

2.3 ELIMINATED ALTERNATIVES

In addition to the No Action Alternative and the expansion of the Existing Turning Basin Alternative, 3 plans for the creation of a new turning basin were considered. The Beach Nourishment Alternative was eliminated from consideration because the material does not meet the criteria for beach placement in that it has high silt content. The MacDill Seagrass Restoration Area was considered in the Draft Environmental Assessment but was eliminated because it was being constructed during a Tampa Harbor maintenance activity. The Whiskey Stump Key Alternative was evaluated but not selected because further study is required to determine impacts. These alternatives were compared with the others and where eliminated for various safety, environmental, economic and logistic reasons.

2.4. DESCRIPTION OF ALTERNATIVES

2.4.1 No Action Alternative.

There would be no construction. The channel dimension would remain the same and maintenance would be continued.

2.4.2 Expansion of Existing Channel and Turning Basin.

The existing channel would be widened to 250 feet and deepened to 42 feet at mean low-low water (mllw) from its confluence with the Hillsborough Bay Channel Cut C to the turning basin on the east terminus of the channel. The existing turning basin would be enlarged to a diameter of 1200 feet with a depth of 42 feet at mllw. Approximately 5.5 million cubic yards of material would be excavated. The standard State and Federal manatee protection conditions as well as special condition during blasting and the Jacksonville District Migratory Protection Policy would be implemented during construction to eliminate impacts on manatees and nesting migratory birds. There would be the replacement of 6.0 acres of mangroves along the new shoreline of the channel and turning basin, creation of 2 inter-tidal channels, creation of 2 reptile ponds, eradication of exotic plants from 15 acres adjacent to the project, and the creation of a mangrove slough. Maintenance dredging of approximately 500,000 from this new channel would occur every 5 years. The dredged material would be placed in Dredged Material Management Areas DA/C and DA/A. In order to accommodate this quantity of material the disposal area dikes would be raised within the existing footprint.

2.4.3 Ocean Dredged Material Disposal Site Placement.

Approximately 5.5 million cubic yards of construction material would be placed in the ODMDS in accordance with the SMMP. If other beneficial uses of the dredged material can be found than, there could be less.

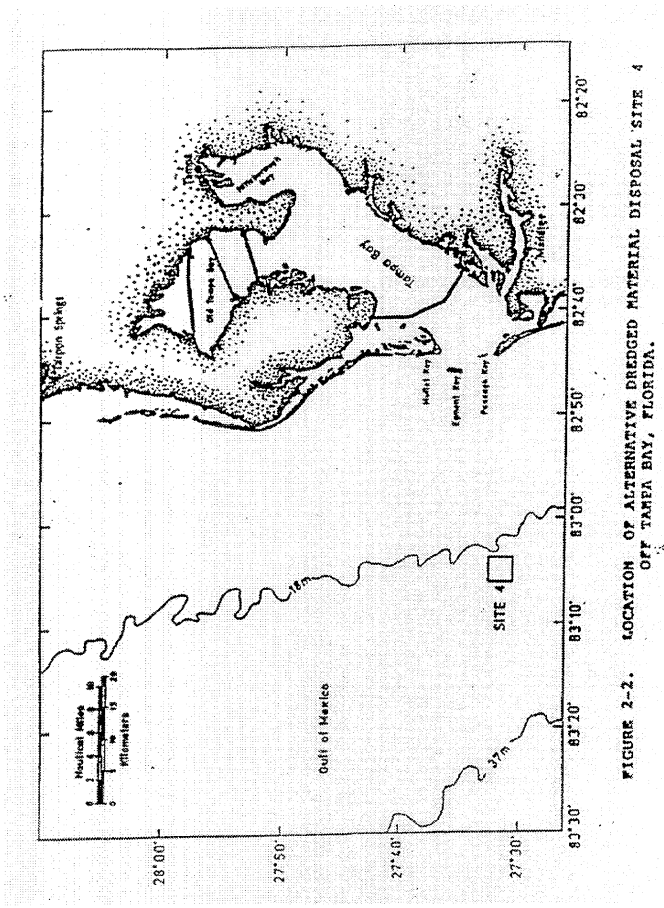

FIGURE 2-2. LOCATION OF ALTERNATIVE DREDGED MATERIAL DISPOSAL SITE 4 OFF TAMPA BAY, FLORIDA.

Figure 2, Ocean Dredged Material Disposal Site.

2.4.4 Dredged Material Management Area CMDA-2D Wetland Creation. .

The estimated capacity tangent to Disposal Island 2D is about 1,545,100 cubic yards. The material would then be placed in an area along the southeastern shoreline of the island to create 107 acres of wetland habitat. Spartina sp. would be planted within this area. It would also be designed to have tidal channels and ponds. The standard State and Federal manatee protection conditions and the Jacksonville District Migratory Protection Policy would be implemented during construction to eliminate impacts on Manatees and nesting migratory birds.

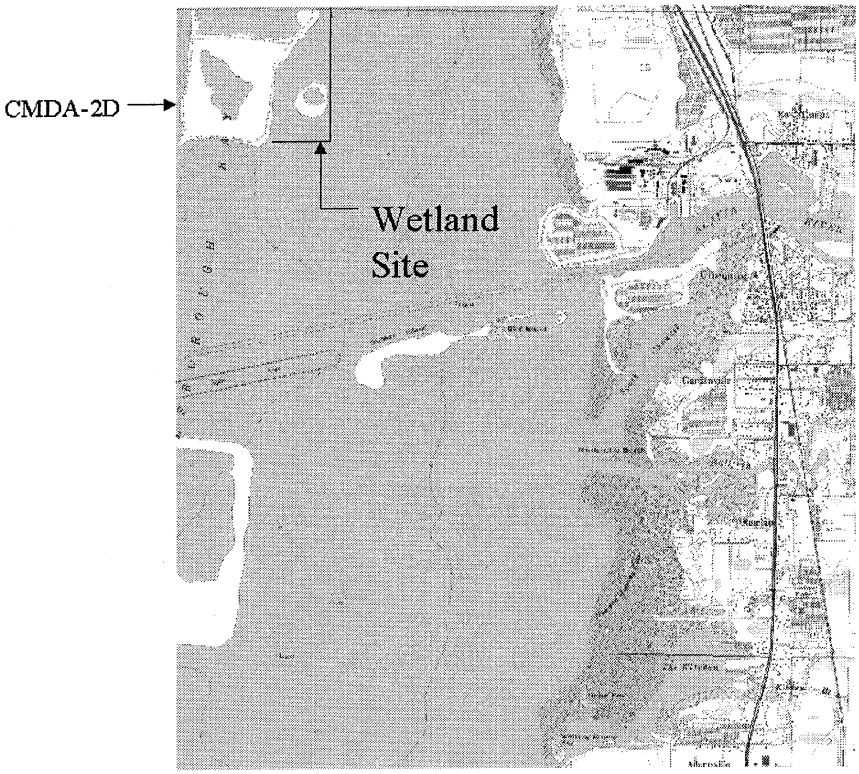

Figure 4, Dredged Material Management Area CMDA-2D, Wetland Creation Site

2.4.5 Bird Island Expansion.

The Corps has proposed using the dredged material from Alafia River to expand Bird Island along the south channel to 52 acres to enhance the bird nesting areas and wildlife habitat. The island has experienced some erosional losses in the past due to major storm events and routine annual tidal forces. Historically, material has been periodically added to the west and northwest banks to replace those losses. To restore lost land due to erosion and add more land area, good rock material is necessary. Material from the deepening of the proposed new project at Alafia River could help with that historical effort. The result is to protect, restore, and enhance the suitability of the island as a colony site for nesting birds as well as habitat for aquatic and marsh wildlife. Spartina plants would be planted along 2,700 feet of shoreline on the southeastern and eastern banks of the elliptical land area. Mangrove stands are expected to rapidly develop in the Spartina planting areas. The standard State and Federal manatee protection conditions and the Jacksonville District Migratory Protection Policy would be implemented during construction to eliminate impacts on Manatees and nesting migratory birds. Seagrass protection conditions would be implemented to avoid affecting adjacent resources.

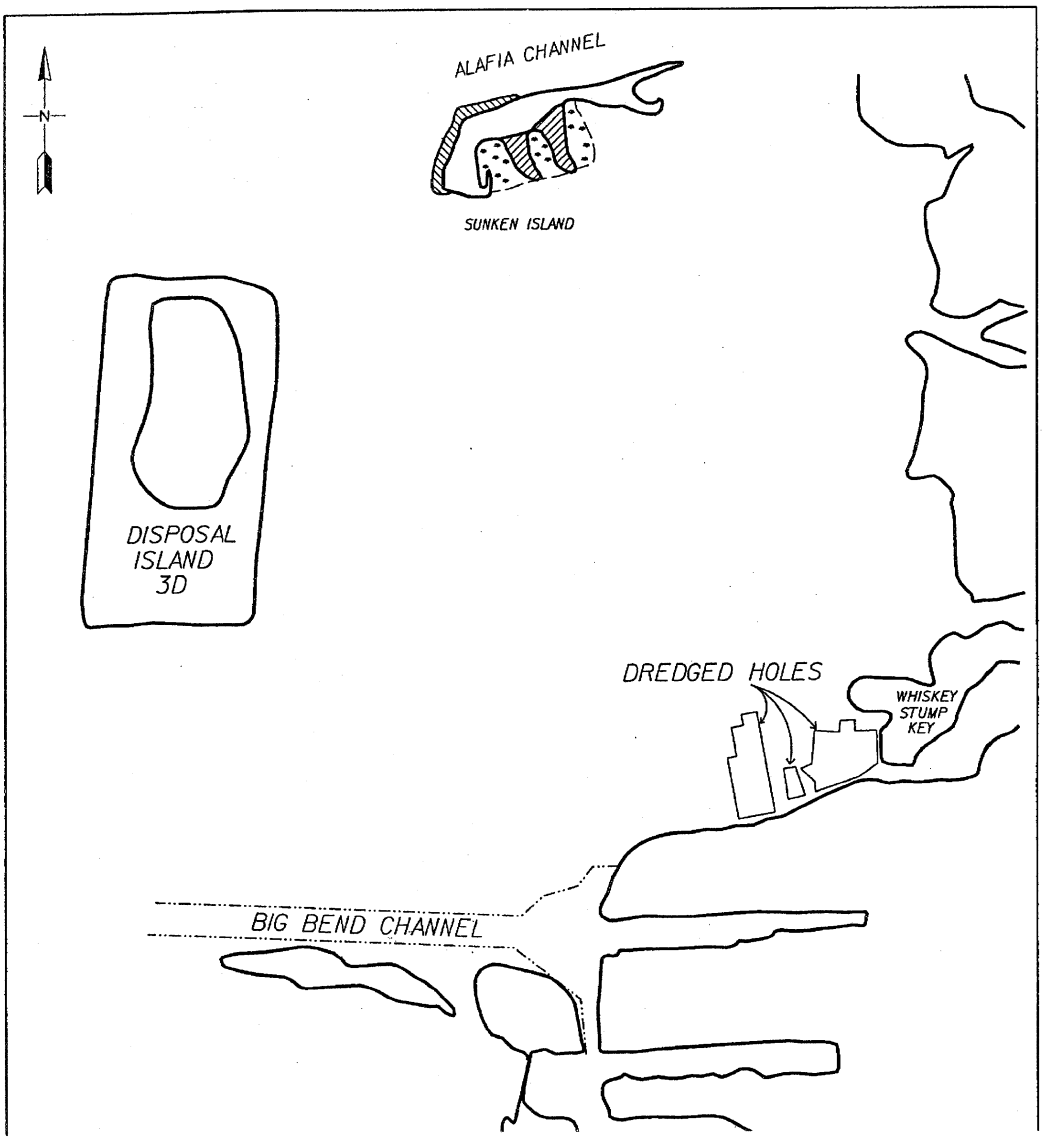

Figure 5, Bird/Sunken Island Expansion

2.4.6 Whiskey Stump Key Seagrass Restoration Site.

Approximately 950,000 cubic yards of material from the construction would be placed in the hole adjacent to the Port Redwing near Whiskey Stump Key. The material would be placed to an elevation of less than 1 meter to promote seagrass growth. The standard State and Federal manatee protection conditions would be implemented during construction to eliminate impacts on Manatees. Seagrass protection conditions would be implemented to avoid affecting adjacent resources.

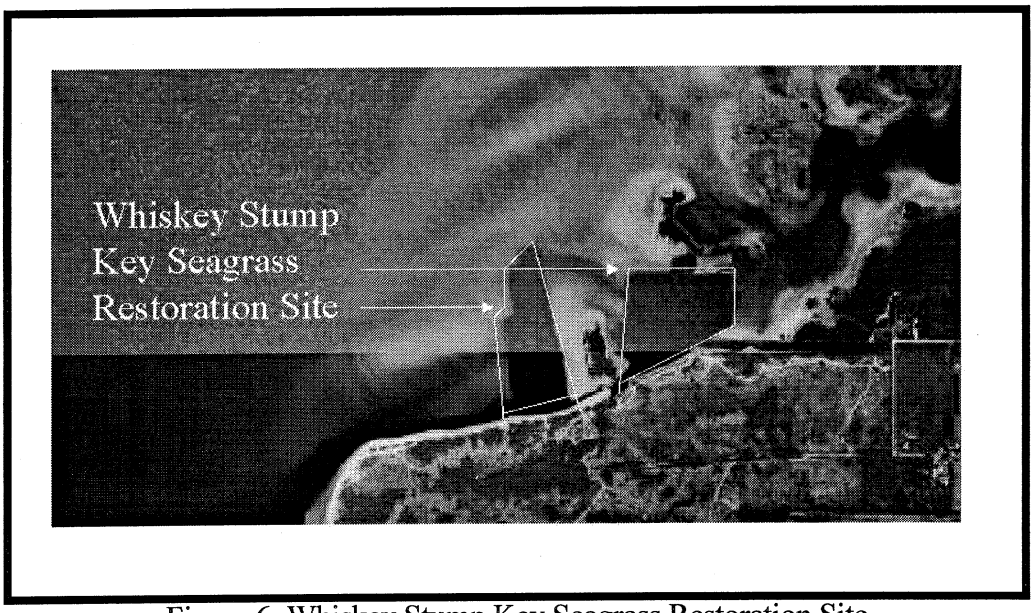

Figure 6, Whiskey Stump Key Seagrass Restoration Site

2.5. ALTERNATIVE ANALYSIS.

The positive and/or adverse effects upon the important resources for the alternatives have been reviewed and compared in Table 1, Alternative Comparison Chart. This comparison was utilized in the decision-making process.

2.6 PREFERRED ALTERNATIVE.

The preferred alternative would be to expand the existing channel and turning basin at the Alafia River Navigation Project site and create additional habitat at Bird Island and CMDA-2D Wetland Area with the dredged material with the remainder of the dredged material being placed in the ODMDS.

TABLE 1: Alternative Comparison Chart

Resources	No-Action Alternative	Whiskey Stump Key Seagrass Restoration	Expansion of Existing Channel and Turning Basin.	Dredged Material Management Area CMDA-2D Wetland Creation.	Bird Island Expansion	Ocean Dredged Material Disposal Site Placement
Water Quality	Local long-term intermittent increase in turbidity from larger ship trying to enter Port and re-suspending bottom sediments. Short-term increase from maintenance dredging.	Short-term increase in turbidity surrounding placement. Water quality protection of seagrass implemented at edge of seagrasses	Short-term increase in turbidity surrounding dredging	Short-term increased turbidity from wetland construction.	Possible disruption of local boating traffic due to presence of dredging equipment	Short-term increase in turbidity surrounding disposal operation
Birds	Wave action will erode Bird Island and reduce nesting habitat. Short-term impact on nesting during maintenance. Impacts mitigated by implementation of Migratory Bird Protection Policy which includes monitoring and avoidance where possible.	No impact.	Short-term disruption to bird nesting from presence and operation of dredging and disposal equipment. Impact mitigated by implementing migratory bird policy. Setting up a 3000' no-construction around Bird Island. Wave action will erode Bird Island and reduce nesting habitat	Short-term disruption to bird nesting from presence and operation of dredging and disposal equipment. Impact mitigated by implementing migratory bird policy. Long-term creation of 107 acres of bird nesting and foraging habitat.	Short-term disruption to bird nesting from presence and operation of dredging and disposal equipment. Impact mitigated by implementing migratory bird policy. Long-term creation of 52 acres of bird nesting and foraging habitat	No impact.

Resources	No-Action Alternative	Whiskey Stump Key Seagrass Restoration	Expansion of Existing Channel and Turning Basin.	Dredged Material Management Area CMDA-2D Wetland Creation.	Bird Island Expansion	Ocean Dredged Material Disposal Site Placement
Manatees	Short-term impact. Impacts mitigated by implementing State and Federal manatee protection conditions. If a clamshell is used special manatee observers used.	Short term impact on manatees. Impacts mitigated by the implementation of standard protection conditions	Short term impact on manatees. Impacts mitigated by the implementation of the standard and special blasting protection conditions.	Short term impact on manatees. Impacts mitigated by the implementation of standard protection conditions.	Short term impact on manatees. Impacts mitigated by the implementation of standard protection conditions.	No impact.
Seagrass Beds	No impact.	Turbidity could impact adjacent patchy seagrass beds. Seagrass protection measures implemented. Long-term benefit to seagrasses by providing a platform for seagrass growth.	No impact.	No impact.	No impact.	No impact.
Wetlands	No impact	No impact	Loss of 6.0 acres of mangroves. Mitigation would be creation of 6.0 new acres, creation of 2 inter-tidal channels, 1 mangrove slough, creation of 2 reptile ponds, and	Increased potential for mangrove habitat.	Increased potential for mangrove habitat.	No impact.

Resources	No-Action Alternative	Whiskey Stump Key Seagrass Restoration	Expansion of Existing Channel and Turning Basin.	Dredged Material Management Area CMDA-2D Wetland Creation.	Bird Island Expansion	Ocean Dredged Material Disposal Site Placement
			eradication of exotics from 15 acres.			
Benthic Habitat	No adverse effects are anticipated.	Temporary loss of 53 acres of silt habitat. Habitat raised to within photic zone.	Elimination of 70 acres of bottom habitat.	Loss of 107 acres of open-water habitat for benthic organisms, replaced by 107 acres of saltmarsh species.	Loss of benthic organisms within placement site. Impacts offset by creation of 52 acres of saltmarsh habitat.	Temporary loss of benthic organisms within the site. Long-term re-colonization.
Cultural Resources	No adverse effects.	No adverse effects are anticipated for use of disposal areas.	A potentially significant historic property is located near the mouth of Alafia River and may be effected.	No adverse effects are anticipated for use of disposal areas.	No adverse effects are anticipated for use of disposal areas.	No adverse effects are anticipated for use of disposal areas.
Recreation	No impact.	Possible disruption of local boating traffic due to presence of dredge & pipeline placement	Possible disruption of local boating traffic due to presence of dredging equipment	Possible disruption of local boating traffic due to presence of dredging equipment	Possible disruption of local boating traffic due to presence of dredging equipment	No impact.

Resources	No-Action Alternative	Whiskey Stump Key Seagrass Restoration	Expansion of Existing Channel and Turning Basin.	Dredged Material Management Area CMDA-2D Wetland Creation.	Bird Island Expansion	Ocean Dredged Material Disposal Site Placement
Aesthetics	Short-term impact from presence and operation of equipment during maintenance.	There would be a short-term minor decrease in aesthetics to recreational fishing and boating that use this are for fishing.	There would be a short-term minor decrease in aesthetics to recreational fishing and boating that use the Alafia River and the wetland recreation area south of the Alafia River channel during construction	There would be a short-term minor decrease in aesthetics to recreational fishing and boating that use the shoreline of CMDA-2D	There would be a short-term minor decrease in aesthetics to recreational fishing and boating that use Bird Island shoreline.	No impact.
Navigation	Long-term reduction in safety as larger ships try to use the channel. Short-term minor impact during maintenance	No impact.	Increased safety for navigation. More efficient cargo handling from increased vessel size.	No impact.	No impact.	Short-term increased traffic flow during transit to and from site.

Resources	No-Action Alternative	Whiskey Stump Key Seagrass Restoration	Expansion of Existing Channel and Turning Basin.	Dredged Material Management Area CMDA-2D Wetland Creation.	Bird Island Expansion	Ocean Dredged Material Disposal Site Placement
Economics	There would be a long-term loss in revenues generated by the Port from a reduction in cargo and an adverse impact on the local economy from job losses, salaries, and sale of commodities. Short-term impact during maintenance from the sale of goods and services in support of operation	Short-term minor effect on local economy due to sale of goods and services during construction.	Short-term minor effect on local economy due to sale of goods and services during construction. Secondary major long-term benefit from increased shipping	Short-term minor effect on local economy due to sale of goods and services during construction.	Short-term minor effect on local economy due to sale of goods and services during construction.	Short-term minor effect on local economy due to sale of goods and services during construction.